

Maryland - 2003

Forest Health Highlights



The Resource

Maryland occupies a land area of 6,255,800 acres. Forest land comprises 2,565,800 acres of which nearly 76 percent is privately owned. Healthy, productive forests are critical in urban and rural areas for soil conservation, clean air and water, wildlife habitat, outdoor recreation, and aesthetics. The forest products industry is the largest employer in Allegany and Garrett Counties and the second largest employer on the Eastern Shore.

Forest Health Monitoring

The Forest Health Monitoring (FHM) Program has two components: a plot network and off-plot surveys. The USDA Forest Service Northeastern Station Forest Inventory and Analysis Staff administers the plot network in Maryland. The plot network is designed to annually monitor, assess, and report on changes in the long-term condition of trees, soils, lichens, and air quality in forests.

The Maryland Department of Agriculture conducts the off-plot survey component of FHM. The objectives of the FHM Program are to delimit, map, and report on forest pest problems as a supplement to the FHM plot network. Aerial and ground surveys, data collection, and reporting are conducted in accordance with FHM standards for air operations and GIS.

Forest Pests Issues

Gypsy Moth — In 2003, the MD Cooperative Gypsy Moth Suppression Program treated trees on 9,927 acres of municipal, recreation, county, or private land and 4,126 acres of State-owned

land. The total treatment acreage in 2003 (4,053 in 12 counties) was nearly 15,000 acres less than in 2002. Most of the treated acres were in Cecil County (2,540 acres.) A total of 112 acres of trees were defoliated across the State. This was a significant decrease from the 13,739 acres defoliated in 2002. All of the defoliation occurred on untreated lands in Dorchester County.

Bark Beetles — Since 1993, through USDA, APHIS-CAPS, the Maryland Department of Agriculture has searched for **exotic bark beetles** in Maryland as part of a national survey for five European bark beetle species. These exotic bark beetles, which have the potential for causing economic and ecological impacts in the United States, are sampled with pheromone-baited Lindgren funnel traps. Importers of marble, tile, and granite were identified as possible sources of infested solid wood packing-material. Black light traps and pheromone-baited traps were placed in and around warehouses from May through October. No target species were trapped in 2003. The **pine shoot beetle**, another European bark beetle, was the target of a USDA, APHIS-funded survey conducted for the tenth consecutive year in 10 Maryland counties. The pine shoot beetle was first found in western Maryland in 1995. In 2003, a pine shoot beetle was found in a trap in Montgomery County, and beetles have now been recorded from all five western Maryland counties (Allegany, Frederick, Montgomery, Garrett, and Washington). Significantly more beetles were found in traps in Garrett County in 2003 than in previous years. A federal quarantine restricts pine material moving from these counties. **Southern pine beetle** populations continue to remain low in the State.

Hemlock Woolly Adelgid (HWA) — HWA remains the major threat to the health of eastern hemlock. Infested hemlocks occur in the metropolitan area between Baltimore and Washington and in natural stands from Harford to Garrett Counties. A joint MDA-DNR HWA Task Force was initiated to address multidisciplinary needs of the HWA infestation. As part of a mid-Atlantic multi-state survey, 13 plots have been set up in six counties to assess the HWA impact on hemlock stands. The potential for HWA biological control by the predatory ladybird beetle, *Pseudoscymnus tsugae*, was evaluated in Washington County and in Rocky Gap State Park in Allegany County during 2003.

Fall Cankerworm — Isolated infestations of this native spring defoliator caused spotty defoliation totaling 2,487 acres in Allegany, Carroll, Frederick, and Anne Arundel Counties.

Miscellaneous Forest Insects — Variable oakleaf caterpillars caused more than 6,000 acres of defoliation in St. Mary's, Caroline, and Queen Anne's Counties. This was the first noticeable defoliation by this insect in 25 years. The **holly looper** also caused noticeable defoliation to understory hollies in several counties in southern Maryland. **Anthracnose** caused defoliation of several different species in the spring of 2003. Oaks, maples, and dogwoods were most severely affected, and some trees showed signs of twig dieback.

Special Issues

Beech Scale — Beech scale was reported in Maryland for the first time in 2003. American beech trees in extreme southern Garrett County were found infested with beech scale in June 2003. Adjacent areas in West Virginia have been infested with scale for at least 20 years, and the infestation has slowly been expanding towards Maryland. The associated beech bark disease has not yet been found in Maryland, and appears to still be several miles away in West Virginia.

Emerald Ash Borer — An emerald ash borer survey was conducted in the urban and rural forests of Maryland in 2003. This USDA Forest Service-funded project did not find any emerald ash borers infesting trees; however, infested ash trees were found at a Maryland nursery in August 2003. Infested ash trees from Michigan were sent to the Maryland nursery in April 2003 and some of these trees were sold as part of the nursery's

landscaping business. MDA staff destroyed the remaining trees and other ash that became infested at the nursery. By the end of 2003, MDA Plant Protection staff had traced forward ash trees sold by the Maryland nursery, and plans were being made for tree removal.

Weather

Ice Storm — In late October 2002, an ice storm severely impacted parts of Garrett County. Approximately 30,000 acres of trees were affected by the storm. Most damage occurred in forested areas above 2,500 feet in elevation. Areas affected by the storm were mapped, and a meeting was held to advise forest managers and landowners on impacts and management of storm-impacted areas.

Urban Forestry

Roadside Tree Forest Health Assessment — The Maryland Roadside Tree Law, in effect since 1914, places all trees in the road right-of-way under the DNR's protection. Since 1999, the MDA and the DNR have worked on a collaborative project with the USDA Forest Service to assess the quantity and quality of the Roadside Tree resource growing along more than 30,000 miles of improved road in Maryland. In 2001, this team of agencies developed urban forest health monitoring protocols to initiate a roadside tree survey. In 2001, 300 plots were visited across the State, and inventory data (species, DBH, and height), along with tree health data (crown condition, dieback, and damage), were taken for each tree in a plot. In 2003, a subset of these baseline plots was revisited to begin to monitor change in this urban forest resource. Data from each year of this survey have been compiled and are being analyzed by MDA, DNR, and the USDA Forest Service.

For More Information



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